# AMBLYCERUS TEUTONIENSIS (COLEOPTERA: BRUCHIDAE), A NEW SPECIES OF SEED BEETLE 1,2 

Cibele S. Ribeiro-Costa, ${ }^{2}$ John M. Kingsolver ${ }^{3}$


#### Abstract

Amblycerus teutoniensis is described and illustrated. To provide a specific name to be used in future species group arrangements, this description is presented.

\section*{Amblycerus teutoniensis, new species} (figs. 1-8)


Dimensions: Medium body length 5.14 mm ; width 3.36 mm . Pronotum length 1.38 1.80 mm (mean $=1.62 \mathrm{~mm}$ ); width $1.96-2.63 \mathrm{~mm}$ (mean $=2.44 \mathrm{~mm}$ ). Elytra length $2.48-4.20$ mm (mean $=3.52 \mathrm{~mm}$ ); width $2.84-3.80 \mathrm{~mm}$ (mean $=3.36 \mathrm{~mm}$ ).

Integument: Black except four basal antennal segments, tarsi and calcaria reddish; entire pygidium and abdomen reddish yellow.

Vestiture: Head, pronotum, elytra, venter of thorax and appendages with brown and bluish gray hairs in irregular mottled pattern (fig. 1). Pronotum sometimes with four small rounded bluish gray spots (fig.2). Scutellum densely pubescent with light yellow hairs (fig.4). Pygidium (fig.5) and abdomen covered with light yellow and golden yellow hairs in a mottled pattern and with some scattered small brown patches.

Body: Subquadrate (fig.1). Vertex micropunctate; frons and clypeus more coarsely punctate than vertex except granulose in narrow apical band; labrum punctate basally. Frons gently flattened, frontal carina evanescent in lower half, sometimes absent; frontoclypeal suture indistinct. Mesal margin of eye with fine carina and umbilicate punctures: eye finely faceted, moderately protruding laterally; ocular sinus (emargination) $1 / 3$ length of eye and ocular index (width across eyes/width between eyes) $2.8: 1$; postocular lobe long. Antenna subserrate from fifth to tenth segments, eighth to tenth segments slightly wider than long; terminal segment subelliptical (fig.6). Pronotum (fig.2) subconical, lateral margins gently arcuate; disk evenly convex; basal lobe broadly angulate, usually not sulcate; surface densely punctulate, lateral one-third of disk on either side also coarsely punctate, middle also with some punctures smaller than those on lateral areas; basal and apical margins without sulci; lateral carina (fig.3) divided near base and gently divergent toward apex, delimited by fine shallow dorsal and fine deep ventral sulci; cervical boss with two fine setae (fig. 3), posterior angle of pronotum with one seta. Prosternum moderately narrow with sulcate lateral margins and slightly expanded beyond procoxae. Scutellum 1.3

[^0]times as long as wide, apex trilobed (fig.4). Elytra as long as wide, evenly convex except slightly depressed around scutellum; sutural, third, fifth, seventh and ninth intervals gently elevated on middle apical portion; striae strongly impressed, strial punctures fine; elytral apices rounded. Mesosternum elevated, rounded apically. Postmesocoxal sulci meeting mesally at acute angle, then extending laterally and connecting to parasutural sulci, the latter extending beyond middle length of metasternum. Metepisternum punctulate, also with many coarser punctures, lacking striate file; metepisternal sulcus nearly right angled, vertical arm reaching apex and longitudinal arm very short, not reaching middle length of metepisternum. Metasternum between middle coxae not bulging. Face of hind coxa in distal two-thirds and along posterior border of proximal one-third setose and densely punctulate; many scattered larger punctures on distal two-thirds; proximal one-third glabrous in part and punctate except in a reduced area. Metafemur slender, 2.9 times as long as wide (fig.7); ventral face slightly sulcate in distal three-fourths; mesoventral carina complete but lacking blunt, angulate process near apex. Ventral face of hind tibia slightly concave, each margin with row of punctures and short, stiff setae; mesal face lacking tumidity at distal two-thirds; apex with a few, short coronal denticles. Mesal tibial spur one-fifth as long as lateral spur and one-third as long as first metatarsal segment (fig.7). Pygidium (fig.5) vertical, subtruncate apically; surface punctulate and with many coarser punctures. Fifth visible abdominal sternum slightly emarginate in male and rounded in female. Eighth tergite rounded in male.

Male terminalia (figs.8,9): Median lobe with ventral valve acute apically, lateral margins incurvate, base broad; dorsal valve subtriangular, lateral margins nearly straight, apex rounded. Internal sac armature (fig.8) consisting of two basal subconcave, slippershaped sclerites with short irregular protuberances near apex (figs.8D,8d); two subbasal sclerites, four times as long as wide, subrectangular, slightly sinuate and with serration directed apicad along a margin (fig. 8 b ) near the place of precedent pair and in part overlapping it, two subbasal sclerites, 2.1 times as long as wide at base, subtriangular, very sinuate and armed with denticles directed basad (fig.8e); two long, laminar, median sclerites, slightly angulate toward basal and median portions, with one or two rows of basally directed denticles along middle apical portion; unpaired, median wishbone-shaped sclerite, shorter than the laminars ( 1.3 as long as the length of laminars), with strongly incurvate lateral margins on middle apical portion, rounded apex in lateral view (fig. 8 C ) and distinctly separate stems; apical sclerite with broad lateral areas and long stems (fig.8). Internal sac membrane with spines on basal and median portions (figs. $8 \mathrm{~A}, 8 \mathrm{~F}$ ). Lateral lobes with moderately deep rounded cleft between them (fig.9).

## Etymology: The species name refers to the place where the holotype was collected: Nova Teutônia, Santa Catarina, Brazil.

Type Material: Holotype, male: BRAZIL: Sta.Catarina, Nova Teutônia; 14.II.1944; F. Plaumann; deposited in the National Museum of Natural History, Washington (NMNH). Allotype, BRAZIL: Sao Paulo, Ilha da Vitória, 16-27.11I.1964, Exp.Dep.Zool, deposited in the Museu de Zoologia de Sao Paulo (MZSP); one male paratype with same label as holotype, deposited in the Museu de Entomologia do Departamento de Zoologia da Universidade Federal do Paraná (DZUP); additional three paratypes.- BRAZIL: Mato Grosso, Chapada dos Guimaraes, April, Acc.No.2966, deposited in the Carnegie Museum of Natural History, Pittsburg (CARN); Rio Grande do Sul, São Leopoldo, 15.X.1982, C.J.Becker, 60.602, deposited in the Fundaçao Zoobotânica do Rio Grande do Sul (FZB,MCN); PARAGUAY: Sao Bernardino, 27.XII, Amaranthaceae, K. Fiebrig (NMNH); Depto. Alto Parana, Centro For. Alto Parana, $25^{\circ} 30^{\prime} \mathrm{S}, 54^{\circ}, 44^{\prime} \mathrm{W}, 14-16-\mathrm{V}-1986$. Pogue \& Solis (NMNH).


Figs.1-9.Amblycerus teutoniensis, new species. 1, dorsal habitus; 2, pronotum; 3, lateral view of pronotum; 4 , scutellum; 5 . pygidium; 6 . antenna; 7 , hind trochanter, femur, tibia and first metatarsal segment; 8, male genitalia. median lobe: A-spines on basal portion enlarged, b subbasal serrate sclerites, c-lateral view of wishbone-shaped sclerite, d- ventral view of basal sclerite. D-same enlarged, e-subbasal spinous sclerites, F-spines on median portion. enlarged; 9, tegmen.

## DISCUSSION

This species is most closely related to $A$. canescens (Boheman). Both share many characters such as body, except pygidium and abdomen, mottled with brown and bluish gray hairs, postocular lobe long, eyes finely faceted, lateral carina of pronotum divided, scutellum trilobed, longitudinal arm of metepisternal sulcus very short, metepisternum and hind coxa evenly punctured, mesal mesotibial spur about middle length of lateral spur and one-third length of the first hind tarsal segment.

Amblycerus teutoniensis can be distinguished from A. canescens by the reddish yellow integument of the first four antennal segments, tarsi, pygidium and abdomen; these parts are entirely black in $A$. canescens.

The characters in the internal sac of male genitalia are comparable in these two species. Differences are found in the shape of both pairs of subbasal sclerites (short in teutoniensis, longer in canescens; the other subtriangular with denticles directed basad in teutoniensis (fig.8e), subrectangular with denticles directed apicad in canescens; in the shape of the long laminar sclerites (slightly angulate in teutoniensis, strongly angulate in canescens; and in the wishbone-shaped sclerite (with incurvate lateral margins and distinctly separate stems in teutoniensis, nearly straight and moderately separate stems in canescens).

## ACKNOWLEDGMENTS

We would like to thank Renato C. Marinoni for comments on this paper.

## LITERATURE CITED

Boheman, C.H. 1833. In Schoenherr, C.J. Genera et species curculionidum cum synonymia hujus familiae: species novae aut hactenus minus cognitae, descriptionibus a Dom. Leonardo Gyllenhal, C.H. Boheman, et entomologis aliis. Vol.1(1):1-385. Paris.


[^0]:    ${ }^{1}$ Received October 16, 1992. Accepted April 22, 1993
    ${ }^{2}$ Contribution no. 738 from Departamento de Zoologia of the Universidade Federal do Paraná, C.P.: 19030: CEP:81531-970. Curitiba, Paraná, Brasil.
    ${ }^{3}$ Florida State Collections of Arthropods, Division of Plant Industry. PO Box 147100 , Gainesville, Florida 32614-7100. U.S.A.

